6th GRADE
MAIN RANGEFINDER
3

It is important that you show or explain how you solved the problems on this assessment. If you use a calculator, show how you set up the math.

1. You are going to make a green salad to take to a dinner party. The prices of the ingredients are below.

Lettuce	**2 bunches cost**	**$1.00**
Radishes	**3 bunches cost**	**$0.92**
Cucumbers	**each**	**$0.58**

a. How much will it cost to make a salad with 4 bunches of lettuce, 3 bunches of radishes, and 2 cucumbers? *Show or explain how you found your answer.*

I multiplied lettuce by 2, I multiplied the radishes by 1 I multiplied the cucumbers by 2.

$2.00 + $0.92 = $2.92 + $1.16 = $4.08 to make the salad

58 × 2 = $1.16 cucumbers

Radishes cost 92¢

Lettuce cost with 2 bunches $1.00 × 2 = $2.00

b. How much change will you get back if you pay with a ten-dollar bill? *Show or explain how you found your* answer.

I - the ten-dollar bill by $4.08 and got $5.92

$10.00 - 4.08 = $5.92

Proficient application of basic skills

c. There were a total of 12 people at the dinner party. If there is enough salad for each person to have a serving, how much will each serving cost? *Show or explain how you found your answer.*

I ÷ 12 by $4.08 and got 34¢

34¢ each

12 | 4.08 → 36 → 48 → 48 → 00

12 × 3 = 36

12 × 4 = 48

d. One of the guests took 1/9 of the salad. Another guest took 2/9 of the salad. What fraction of the salad was taken? *Show or explain how you found your answer.*

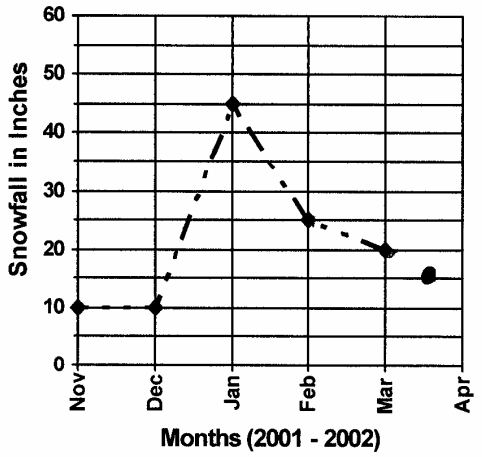
$\frac{1}{9} + \frac{2}{9} = \frac{3}{9}$ of the salad

I added $\frac{1}{9} + \frac{2}{9}$ & got $\frac{3}{9}$

Read problems 2, 3, 4, and 5 on this and the next two pages.
Select three problems to answer. Answer ALL of the parts of the three problems you select to answer.
Cross out the one problem that you do not choose to answer.

2. At Black Bear Mountain Ski Area the monthly snowfalls are shown in the following graph.

Monthly Snowfall



a. Use the information in the graph to find the mean (average) snowfall for the 5 months shown. *Show or explain how you found your answer.*

I added 10, 10, 45, 25, & 20 then I divided them by 5! 10 10 45 25 +20 110

5 | 110 -10 010 middle most

22 is the average

b. Use the information in the graph to find the median, mode, and range of the monthly snowfall. *Show or explain how you found your answer.*

Median 10, 10, 20, 25, 45 20 is the median I got the # & put them in line the 3 in the middle was it

mode 10, 10, 20, 25, 45 10 is the most the one that repeats the most

range 45 -10 35 is the range I - the 45 - 10

see problem A

c. Using the information in the graph, predict the monthly snowfall for April and add it to the graph. *Justify (explain) your prediction.*

I think that it will go down 5, because in Feb- to march it dropped 5!

Effective communication skills

3. Sue is earning money for summer camp. She does chores for her neighbors and charges $3.50 per hour.

c. In the chart below **n** represents the number of hours she worked at each job. Complete the chart to show how much money she earned at each job. *Show or explain how you found your answer.*

How I did it
I x the Job hours by $3.50

	Hours	Earnings per Job
	n	$3.50 x **n** = ?
Job 1	3	$10.50
Job 2	2	$7.00
Job 3	1	$3.50
Job 4	4	$14.00
Job 5	4	$14.00
Job 6	3	$10.50

Job 1: 3.50 x 3 = 10.50
Job 2: 3.50 x 2 = 7.00
Job 3: 3.50 x 1 = 3.50
Job 4: 3.50 x 4 = 14.00
Job 5: 3.50 x 4 = 14.00
Job 6: 3.50 x 3 = 10.50

Adequate understanding of situation

b. What is the total amount Sue has earned for summer camp? *Show or explain how you found your answer.*

see problem
I added all the earnings I got $59.50
10.50 + 7.00 + 3.50 + 14.00 + 14.00 = 49.00
49.00 + 10.50 = 59.50
$59.50 is the total amount of money

c. Let **n** represent the number of hours Sue works. If the camp costs $126.00, write an equation, **using n**, to show how many more hours she needs to work to pay for camp. Solve the equation. *Show or explain how you found your answer.*

I subtracted $126.00 - 59.50
$126.00 - 59.50 = N
the answer to N is.. $66.50
126.00 - 59.50 = 66.50

Adaptable processes

4. The Appaloosa Middle School basketball team practices each week on Monday, Tuesday, and Wednesday for 2 ½ hours after school.

a. If practice begins at 3:15 PM, what time does practice finish? *Show or explain how you found your answer.*

3:15 + 2 hours = 5:15
5:45 pm
I thought 3:15 to 4:15 - 1 hour so 4:15 - 5:15 is 2 hours + 45 min

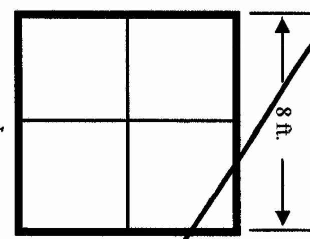
b. What is the total time they practice each week? *Show or explain how you found your answer.*

seven & 50 min
7 hour & 50 min
12.50 x 3 = 7.50

c. If students are required to practice for 10 hours before they may play in their first game, how many days will they have to practice before they qualify to play? *Show or explain how you found your answer.*

4 days
7.50 + 8.50 + 9.50
I thought 7:50 - 8:50 - was 2 hours + 50 min

5. The side length of a four-square court measures 8 ft.

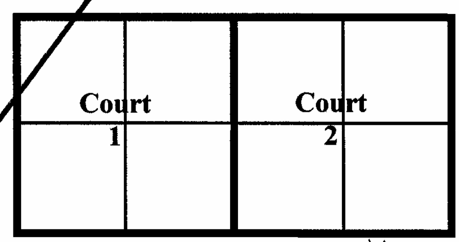


a. What is the perimeter of the four-square court? *Show or explain how you found your answer.*

I added 8+8+8+8 or 8×4

8
+4
32 ft

a. What would be the perimeter of the rectangle formed by 2 four-square courts if they shared one side? *Show or explain how you found your answer.*



I added 16+16 & 8+8

48 ft

32
+16
48

8
+8
16

16
+16
32

b. What would be the area (in ft^2)? *Show or explain how you found your answer?*

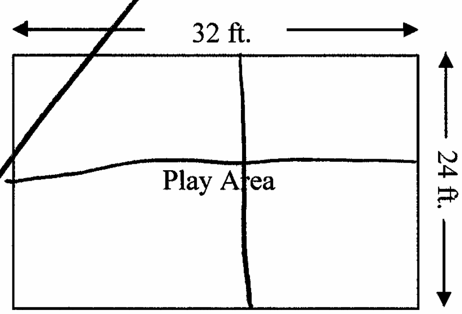
416
x 8
128

128 ft²

I x 16 x 8

d. If the play area measures 32 ft. x 24 ft., how many individual four-square courts can you fit into the area if they could share any number of sides? *Show or explain how you found your answer.*

I x 8x16 = 32



2 four square courts